



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

December 05, 2013

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-2100522, issued to EQT PRODUCTION COMPANY, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.



James Martin
Chief

Operator's Well No: 607831 (FRASHURE #1)
Farm Name: JONES LAND & DEVELOPMENT
API Well Number: 47-2100522
Permit Type: Plugging
Date Issued: 12/05/2013

Promoting a healthy environment.

PERMIT CONDITIONS

West Virginia Code § 22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
3. Well work activities shall not constitute a hazard to the safety of persons.

ck 16904
10000
Date: November 22, 2013
Operator's Well
Well No. 607831 (Frashure #1)
API Well No.: 47 021 - 00522

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

- 4) Well Type: Oil _____ Gas X Liquid Injection _____ Waste Disposal: _____
If Gas, Production _____ X Or Underground storage _____ Deep _____ Shallow X
- 5) Elevation: 968' Watershed: Jakes Run
Location: Glenville 03 County: Gilmer 21 Quadrangle: Gilmer 7.5' 365
District: _____
- 6) Well Operator EQT Production Company
120 Professional Place
Address: Bridgeport, WV 26330
- 7) Designated Agent: Rex C. Ray
Address: 120 Professional Place
Bridgeport, WV 26330
- 8) Oil & Gas Bryan Harris
Name: P.O. Box 157
Address: Volga, WV 26238
- 9) Plugging Contractor:
Name: HydroCarbon Well Service
Address: PO BOX 995
Buckhannon, WV 26201

- 10) Work Order: The work order for the manner of plugging this well is as follows:

See Attachment for details and procedures.

RECEIVED
Office of Oil and Gas

DEC 05 2013

WV Department of
Environmental Protection

OFFICE USE ONLY

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector

Bryan Harris Date 12-4-13

PLUGGING PROGNOSIS - Weston

Frasure #1 (607831)

GILMER, COUNTY, WEST VIRGINIA

API # 47-021-00522

Burnsville Quad

ELEV: 968'

BY: Craig Duckworth

DATE: 9/12/13

CURRENT STATUS:

10" csg @ 154'
 8 1/4" csg @ 776'
 6 5/8" csg @ 1698'
 3" csg @ 1856' (Packer @ 1758')

TD @ 1856'

Fresh Water @ 63'-65'

Salt Water @ None reported

1st Salt Sand @ 1202'

Coal @ 63'-65'

Gas shows @ Slate 1812', Big Injun 1783', 3RD Salt Sand 1439', 2nd Salt Sand 1298'

Oil Shows @ none reported

Stimulation: Shot @ 1811'-1824' (60qts.)

1. Notify State Inspector, **Bryan Harris 304-553-6087**, 24 hrs. Prior to commencing operations.
2. Attempt to pull 3" & packer (1856'). If unable to pull 3" cut at top of packer @ 1856' and pull 3"
3. TIH w/ tbg @ 1856'; Set 126' C1A Cement Plug @ 1856' to 1730' (gas show @ 1812 & Big Injun @ 1783')
4. TOOH w/ tbg @ 1730'; gel hole @ 1730' to 1648'.
5. TOOH w/ tbg, Free Point 6 5/8", cut 6 5/8" @ free point, TOOH w/ 6 5/8" csg
6. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 6 5/8" cut. Do not omit any plugs
7. TIH w/ tbg @ 1648'; Set 100' C1A Cement Plug @ 1648' to 1548' (6 5/8" csg @ 1698')
8. TOOH w/ tbg @ 6 5/8" 1648; gel hole @ 1548' to 1439'
9. TOOH w/ tbg @ 1439'; Set 337' C1A Cement Plug @ 1439' to 1102' (Gas Shows @ 3rd Salt Sand 1439' & 2nd Salt Sand 1298' 1st Salt Sand 1202)
10. TOOH w/ tbg @ 1102'; gel hole @ 1102' to 826'.
11. Free point 8 1/4" @ 776. If unable to pull. Cut at free point
12. TOOH w/ tbg @ 826'; Set 100' C1A Cement Plug @ 826' to 726' (8 1/4" csg @ 776')
13. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 8 1/4" cut. Do not omit any plugs
14. TIH w/ tbg @ 726' gel hole @ 726' to 200'.
15. TOOH w/ tbg @ 200'; Set 200' C1A Cement Plug @ 200' to Surface
16. Top off as needed
17. Set Monument to WV-DEP Specifications
18. Reclaim Location & Road to WV-DEP Specifications

RECEIVED
 NOV 25 2013
 WV Department of
 Environmental Protection

GEL IS FRESH WATER WITH AT LEAST
 6% BENTONITE.

WEST VIRGINIA DEPARTMENT OF MINES
OIL & GAS DIVISION
W E L L R E C O R D

Permit No. Gil-522
Burnsville Quad.

Company
Address

Farm

Location

Well No.

District

Surface

Commenced

Completed

Shot

Flow

Volume

Rock Pressure

Pittsburgh & W. Va. Gas Co.,
Clarksburg, West Virginia
Wm. Earl Frasure et ux Acres 132
Burns. N/W. 1-3
7831 Elev. 977.5 VA
Glenville Gilmer County
Wm. Earl Frasure et ux, Linn, W. Va.
Oct. 15, 1941
Nov. 13, 1941
11-17-41 Depth 1811-1824 (60 qts)
44/10ths Merc. in 1 1/2"
500,000 Cu. Ft.
615 lbs. 24 hrs.

Gas Well

Casing & Tubing

10 154' 154'

8 1/2 776 776

6-5/8 1638 1698

3 1856 1856

Packer - Hook

Size 6-5/8" X 3"

Depth set 1758

Perf. top 1816

Perf. bot. 1836

Coal 53' 24"

Clay	rd	s	0	10	Blue Monday	wh	h	1645	1653
Gravel	gy	s	10	25	Slate	wh	s	1653	1660
Mud	bl	s	25	60	Big Lime	wh	h	1669	1743
Slate	bk	s	60	63	Big Injun	wh	h	1743	1845
Coal	bk	s	63	65W.HF 63'	Gas			1783	83 19/10 7.1"
Slate	wh	s	65	112	Slate	dk	s	1845	1855
Sand	wh	h	112	144	Gas			1812-22	20/10 1.1" O.
Slate	wh	s	144	169	Total Depth			1856	
Red Rock	rd	s	169	268	S. L.			1856	
Slate	bk	s	268	278					
Red Rock	rd	s	278	319					
Slate	bk	s	319	348					
Red Rock	rd	s	348	354					
Slate	wh	s	354	374					
Little Dunkard	h		374	410					
Slate	wh	s	410	536					
Slate	bk	s	536	572					
Big Dunkard	wh	l	572	589					
Slate	wh	s	589	630					
Lime	wh	brk.	630	688					
Slate	wh	s	688	711					
Gas Sand	wh	h	711	7 1					
Slate	wh	s	771	800					
Sand	wh	h	800	831S.L.820'					
Slate	wh	s	831	849					
Hm. Sand	wh	l	849	920					
Slate	bk	s	920	930					
Hm. Sand	wh	l	930	970					
Slate	bk	s	970	1045					
Lime	wh	h	1045	1062					
Slate	bk	s	1062	1202					
1st. Salt Sand	wh	l	1202	1227					
Slate	bk	s	1227	1251					
Lime	wh	h	1251	1264					
2nd. Salt Sand	wh	h	1264	1321G.1298 S.L.1299 G. 10/10 W. 1/2" Onnc.					
Slate	bk	s	1321	1324					
Lime	dk	h	1324	1342					
Slate	bk	s	1342	1359					
Lime	dk	h	1359	1402					
Slate	bk	s	1402	1419	S.L.1445				
3rd. Salt Sand	wh	h	1419	1450G.1439-1441 10/10 W 1"					
Slate	dk	s	1450	1456					
Sand	wh	h	1456	1514					
Slate	dk	s	1514	1520					
Sand	wh	h	1520	1555					
Slate&Shells	wh	s	1555	1570					
Red Rock	rd	s	1570	1594					
Maxon Sand	wh	h	1594	1604					
Red Rock	rd	s	1604	1609					
Slate	wh	s	1609	1621					
Lime	wh	h	1621	1637					
Lime	wh	brk.	1637	1645					

[illegible]

Company PITTSBURGH & W. VA. GAS CO.
Address CLARKSBURG, W. VA.
Farm W^B EARL FRASHURE
Tract _____ Acres 132 Lease No. 22893
Well (Farm) No. 1 Serial No. 7831
Elevation (Spirit Level) 977.5 V.A.
Quadrangle BURNSVILLE N.W. 12
County GILMER District GLENVILLE
Engineer Paul W. Cunningham
Engineer's Registration No. _____
File No. V-97-P-99 Drawing No. _____
Date 8-26-41 Scale 1" = 500'

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION
CHARLESTON

WELL LOCATION MAP

FILE NO. GIL-522

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

15173

WW-4-A
Revised 6/07

1) Date: November 22, 2013
2) Operator's Well Number
607831 (Frashure #1)
3) API Well No.: 47 021 - 00522
State County Permit

**STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS
NOTICE AND APPLICATION TO PLUG AND ABANDON WELL**

4) Surface Owner(s) to be served:
(a) Name Jones Land and Development LLC ✓
Address P.O. Box 1
Sand Fork, WV 26430
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Bryan Harris ✓
Address P.O. Box 157
Volga, WV 26238
Telephone 304-553-6087

5) (a) Coal Operator:
Name None
Address _____
(b) Coal Owner(s) with Declaration ✓
Name Jones Land and Development LLC
P.O. Box 1
Address Sand Fork, WV 26430
Name _____
Address _____
(c) Coal Lessee with Declaration
Name None
Address _____

TO THE PERSONS NAMED ABOVE:

You should have received this Form and the following documents:

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Division of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

Well Operator:

By:

Its:

Address:

Telephone:

EQT Production Company

Victoria J. Roark

Permitting Supervisor

PO Box 280

Bridgeport, WV 26330

(304) 848-0076

Subscribed and sworn before me this

22

day of

November, 2013

Notary Public

My Commission Expires:

8-24-2022

The Office of Oil & Gas processes your personal information, such as name, address and phone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacy@wv.gov



2100522P

WW-9
Revised 2/03

Page ____ of ____
2) Operator's Well Number
607831 (Frashure #1)
3) API Well No.: 47 021 - 00522

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS
CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name: EQT PRODUCTION COMPANY OP ID: _____
Watershed: Jakes Run Quadrangle: Gilmer 7.5'
Elevation: 968' County: Gilmer District: Glenville

Description of anticipated Pit Waste: Formation Fluids

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes___ No X
Will synthetic liner be used in the pit? Yes Is so, what ml.? 30 ml

Proposed Disposal Method for Treated Pit Wastes:

- X Land Application
- ____ Underground Injection - UIC Permit Number _____
- ____ Reuse (at API Number) _____
- ____ Offsite Disposal Permit #. _____
- ____ Other: Explain _____

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. _____
If oil based, what type? Synthetic, petroleum, etc. _____

Additives to be used? _____

Will closed loop system be used? _____

Drill Cuttings disposal method? Leave in pit, landfill, remove offsite, etc. _____
If left in pit and plan to solidify what medium will be used? Cement, Lime, sawdust _____
Landfill or offsite name/permit number? _____

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Division of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any terms or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature *Victoria Roark*

Company Official (Typed or Printed) Victoria Roark

Company Official Title Permitting Supervisor-WV

Subscribed and sworn before me this 22 day of November, 2013

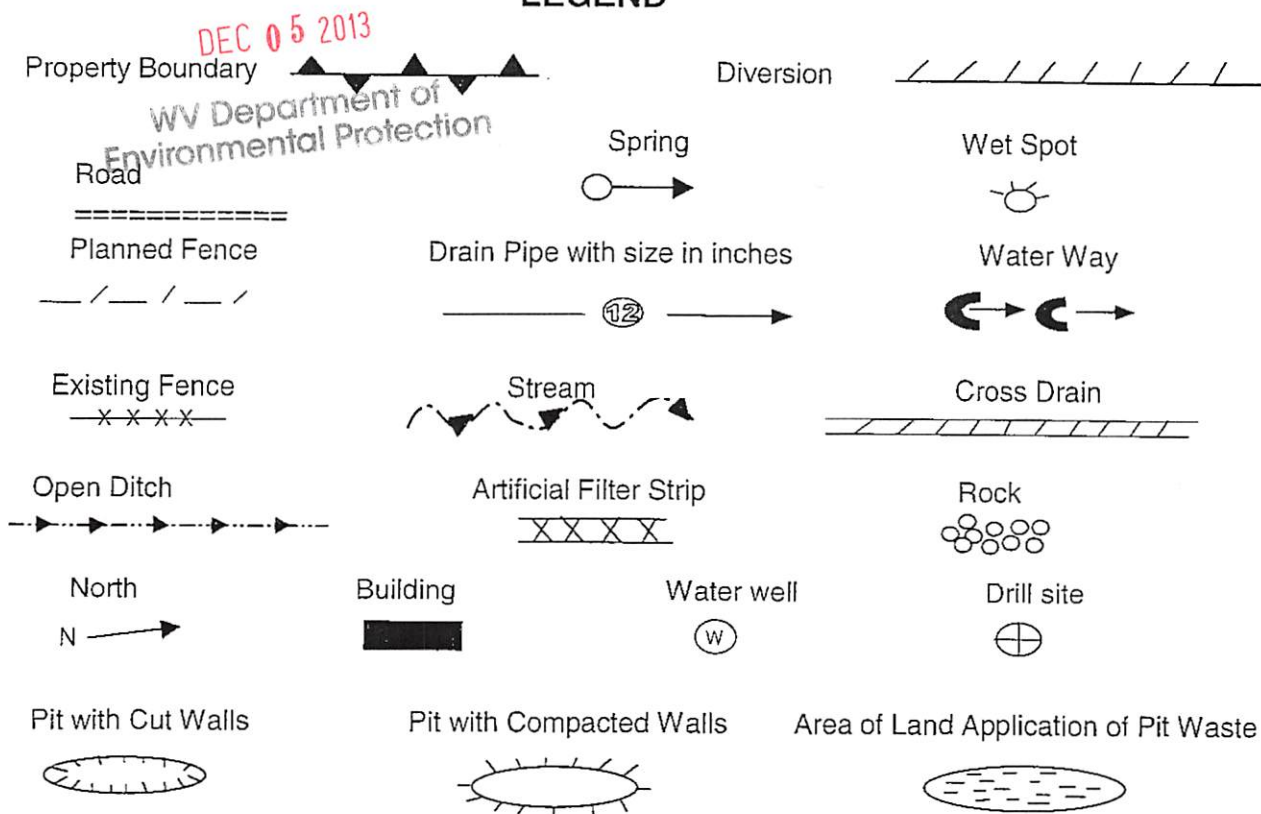
Kathy M. Kugel
My Commission Expires 08-24-2022



RECEIVED
Office of Oil and Gas

OPERATOR'S WELL NO.:
607831 (Frashure #1)

LEGEND



Proposed Revegetation Treatment: Acres Disturbed: 1± Prevegetation pH 5.8

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20) or equivalent 1/3 ton lbs/acre (500 lbs minimum)

Mulch 2 Tons/acre or hydroseed.

SEED MIXTURES

Area I

Seed Type	lbs/acre
KY-31	40
Alsike Clover	5
Annual Rye	15

Area II

Seed Type	lbs/acre
Orchard Grass	15
Alsike Clover	5

ATTACH:

Drawing(s) of road, location, pit and proposed area for land application.

Photocopies section of involved 7.5' topographic sheet.

Plan approved by: Bryan Ham

Comments: _____

Title: Oil & Gas Inspector Date: 12-4-13

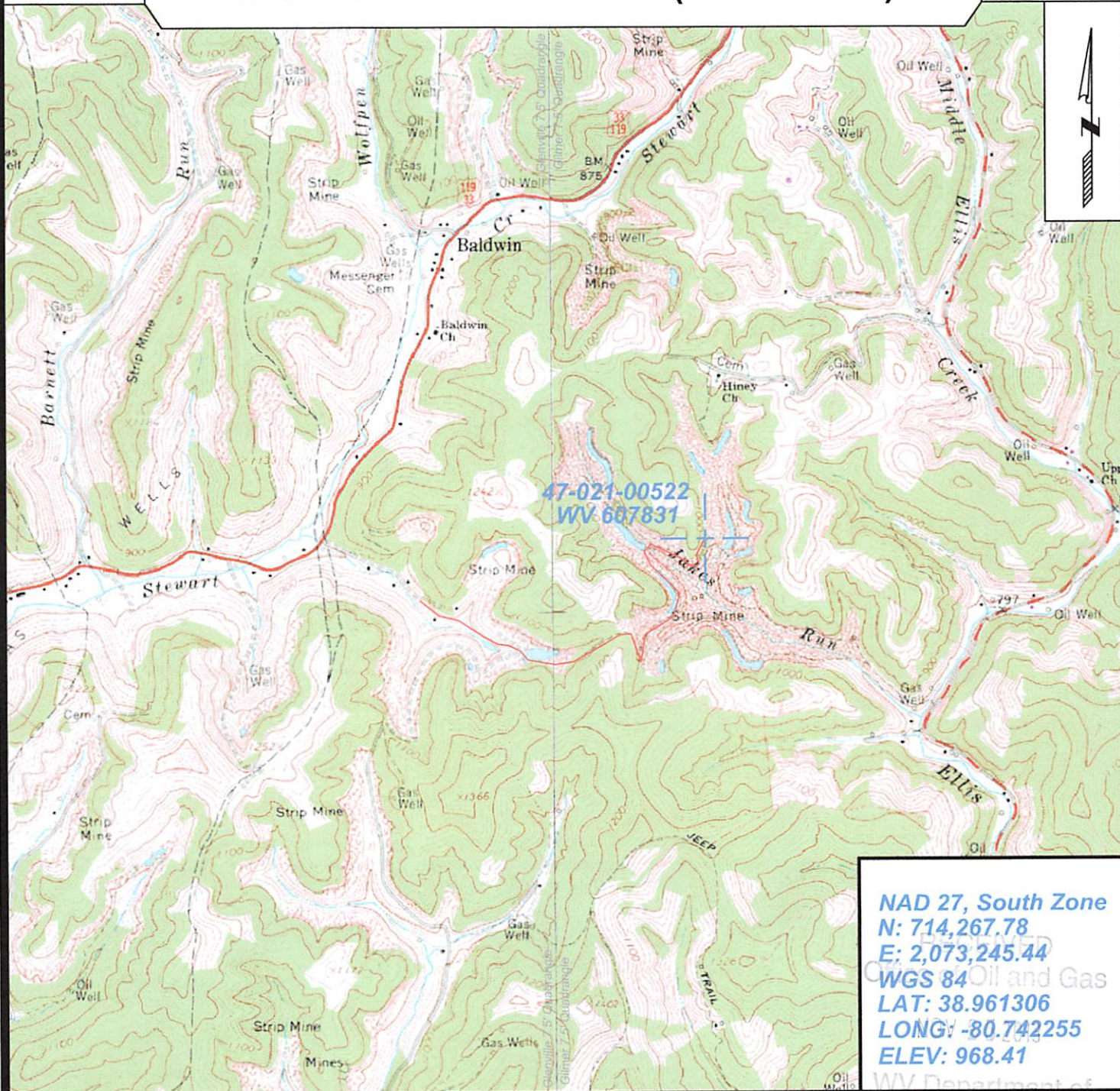
Field Reviewed? X Yes No

2100522 P

Topo Quad: Gilmer 7.5' Scale: 1" = 2000'
 County: Gilmer Date: October 17, 2013
 District: Glenville Project No: 25-19-00-07

47-021-00522 WV 607831 (Frashure #1)

Topo



NAD 27, South Zone
 N: 714,267.78
 E: 2,073,245.44
 WGS 84 Oil and Gas
 LAT: 38.961306
 LONG: -80.742255
 ELEV: 968.41

PREPARED FOR:
 Environmental Protection
EQT Production Company
 P.O. Box 280
 Bridgeport, WV 26330



SURVEYING AND MAPPING SERVICES PERFORMED BY:
ALLEGHENY SURVEYS, INC.
 1-800-482-8606
 P.O. BOX 438
 BIRCH RIVER, WV 26610
 PH: (304) 649-8606
 FAX: (304) 649-8608

WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas
WELL LOCATION FORM: GPS

API: 47-021-00522 WELL NO.: WV 607831 (Frashure #1)

FARM NAME: Frashure

RESPONSIBLE PARTY NAME: EQT Production Company

COUNTY: Gilmer DISTRICT: Glenville

QUADRANGLE: Gilmer 7.5'

SURFACE OWNER: Jones Land & Development, LLC

ROYALTY OWNER: EQT Production Company, et al.

UTM GPS NORTHING: 4312514

UTM GPS EASTING: 522331 GPS ELEVATION: 295 m (968 ft)

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:


1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:

Survey grade GPS ____: Post Processed Differential ____
Real-Time Differential ____

Mapping Grade GPS X: Post Processed Differential X
Real-Time Differential ____

4. **Letter size copy of the topography map showing the well location.**

I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.


Signature
11/4/13
Date

PS # 2180
Title



POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY

LEASE NAME AND WELL No. Frashure #1 WV 607831 (47-021-00522)

POTENTIAL SAMPLE LOCATIONS

There appears to be no known water samples within the required 1000' of the existing well WV 607831.

RECEIVED
Office of Oil and Gas

NOV 25 2013

BIRCH RIVER OFFICE
P.O. Box 438 • 237 Birch River Road
Birch River, WV 26610
phone: 304-649-8606
fax: 304-649-8608

BRIDGEPORT OFFICE
172 Thompson Drive
Bridgeport, WV 26330
phone: 304-848-5035
fax: 304-848-5037

CALDWELL OFFICE
212 Cumberland Street
Caldwell, OH 43724
phone: 740-305-5007
fax: 740-305-5126

ALUM CREEK OFFICE
P.O. Box 108 • 1413 Childress Road
Alum Creek, WV 25003
phone: 304-756-2949
fax: 304-756-2948

Topo Quad: Gilmer 7.5'Scale: 1" = 2000'County: GilmerDate: October 17, 2013District: GlenvilleProject No: 25-19-00-07

Water

47-021-00522 WV 607831 (Frashure #1)

No potential water wells within 1000'

47-021-00522
WV 607831

NAD 27, South Zone
 N: 714,267.78
 E: 2,073,245.44
 WGS 84
 LAT: 38.961306
 LONG: -80.742255
 ELEV: 968.41

PREPARED FOR:

WV DEP 25-19-00-07
EQT Production Company
 P.O. Box 280
 Bridgeport, WV 26330

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